

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

NOVOZYMES A/S,

Plaintiff,

v.

GENENCOR INTERNATIONAL, INC. and
ENZYME DEVELOPMENT CORPORATION,

Defendants.

C.A. No. 05-160 KAJ

DEFENDANTS' POST-TRIAL BRIEF REGARDING REMEDIES PHASE OF TRIAL

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TABLE OF ABBREVIATIONS

For convenience and ease of reference, the following abbreviations are used in the brief.

ABBREVIATION	REFERS TO
'031 Patent	United States Patent No. 6,867,031, TE 100
'038 Patent	United States Patent No. 6,297,038 B1, TE 501
A5017:5-9	Appendix page 5017, lines 5-9
CL (Liability)	Conclusions of Law of August 24, 2006 regarding Liability Phase Trial
D.I.	Docket Item
FF (Liability)	Findings of Fact of August 24, 2006 regarding Liability Phase Trial
Genencor	Genencor International, Inc. and Enzyme Development Corporation, collectively
GCL	Genencor's Proposed Conclusions of Law
GFF	Genencor's Proposed Findings of Fact
Novozymes	Novozymes A/S
NZNA	Novozymes of North America, Inc.
Pl. Br. at 8	Novozymes' Opening Post-Trial Brief at page 8
Pl. FF 96	Novozymes' Proposed Findings of Fact number 96 (Damages)
Pl. CL 5	Novozymes' Proposed Conclusions of Law number 5 (Damages)
Uncontroverted Facts	Updated Proposed Final Pretrial Order (Damages), Uncontroverted Facts Section

I. INTRODUCTION AND SUMMARY OF ARGUMENT

This case is based on a patent that no one, not Novozymes, not NZNA, not Genencor, ever intended to practice. Customers certainly place no value on the '031 Patent: when SPEZYME® Ethyl was pulled from the market, former SPEZYME® Ethyl customers almost unanimously chose to stay with Genencor. It is no wonder, then, that Novozymes must “stretch” the facts and law, employing overblown, inflammatory rhetoric rather than showing the record evidence meeting its evidentiary burden, to try to support its claim for tens of millions in NZNA’s lost profits and enhanced damages.

Novozymes admits the controlling Technology License Agreement (“TLA”) expressly defines NZNA as a non-exclusive licensee, yet insists that NZNA be added as a party because Novozymes “treats” the TLA as an “exclusive license.” Novozymes’ assertion is demonstrably false and, more importantly, legally irrelevant. NZNA is a non-exclusive licensee with no standing here, and Novozymes may not recover NZNA’s alleged lost profits.

Novozymes’ lost profits claim is barred for another reason: it is entirely based on the incorrect assumption that NZNA would have captured all former SPEZYME® Ethyl sales. Because that assumption is proven false, Novozymes has not met its burden to prove its alleged lost profits to a reasonable certainty. No lost profits damages should be awarded.

Novozymes claims willful infringement, suggesting that Genencor intentionally copied the '031 Patent or Liquozyme. Novozymes’ claim lacks the required clear and convincing evidence, and is simply false. Genencor cannot have copied the '031 Patent in developing SPEZYME® Ethyl, because the asserted claims had not been submitted to the Patent Office until after SPEZYME® Ethyl was launched. Even had Genencor “copied” Liquozyme, which it did not, that would not prove willful infringement, as neither Liquozyme nor any other Novozymes’ product embodies the supposedly valuable '031 Patent.

Novozymes further insists that Genencor’s decision to continue sales of SPEZYME® Ethyl alone proves willful infringement and supports enhanced damages. Novozymes is wrong.

Federal Circuit precedent is clear: accused infringers with a good faith belief in their defenses to the patent need not stop selling the accused product to avoid a finding of willful infringement. More critically, Novozymes forgets that both the Patent Office and this Court have already weighed in, agreeing with Genencor that the '031 Patent was at least *prima facie* obvious. That finding, combined with the unrefuted evidence of Genencor's good faith belief, confirms that Novozymes has not met its "clear and convincing" burden to obtain enhanced damages.

Novozymes' other demands for relief fare no better. Novozymes' decision to ignore industry and party licensing behavior underscores the overreaching nature of its demand for a 25% royalty; at most, Novozymes is entitled to 8%. Novozymes similarly fails to address the unanimous application of the Supreme Court's holding in *eBay* to deny permanent injunctions to those, like Novozymes, who do not exploit their patents.

Novozymes is not entitled to lost profits, enhanced damages or a permanent injunction.

II. PARTIES TO THIS LAWSUIT

Novozymes' "mantra" is that while the governing TLA is expressly non-exclusive, "we treat it as if it was an exclusive." *See* Meyer, Tr. (D) at 30:10-31:11, A-15029:10-15030:11; *see also* Olofson, Tr. (D) at 177:3-178:3, A-15176:3-15177:3. This testimony is both legally irrelevant and untrue: Novozymes' own witnesses admitted that Novozymes has not conveyed to NZNA the right to exclude others from practicing the '031 Patent. *See* Meyer, Tr. (D) at 46:17-47:25, A-15045:17-15046:25.

Either way, Novozymes concedes the legally controlling point, that the TLA is expressly and unambiguously non-exclusive. Because NZNA is a non-exclusive licensee, it does not have standing to sue, and it may not be joined as a co-plaintiff. Consequently, Novozymes may not recover any of NZNA's purported lost profits.

A. Standing to Sue for Patent Infringement

A licensee is not entitled to join a lawsuit as a co-plaintiff unless it is an exclusive licensee holding proprietary rights in the patent. *See* 35 U.S.C. § 281; *Intellectual Prop. Dev.*,

Inc. v. TCI Cablevision of Cal., Inc., 248 F.3d 1333, 1345 (Fed. Cir. 2001); *Textile Prods., Inc. v. Mead Corp.*, 134 F.3d 1481, 1484 (Fed. Cir. 1998). A non-exclusive licensee has no standing to join a suit with the patentee. See *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 956 (Fed. Cir. 2006); *Sicom Sys., Ltd. v. Agilent Techs., Inc.*, 427 F.3d 971, 976 (Fed. Cir. 2005); *Intellectual Prop. Dev.*, 248 F.3d at 1345; *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1552 (Fed. Cir. 1995); *Ortho Pharm. Corp. v. Genetics Inst., Inc.*, 52 F.3d 1026, 1030 (Fed. Cir. 1995). This is because a non-exclusive licensee lacks the requisite “legal ownership” of the patent; it cannot exclude others from practicing the patent and suffers no compensable injury from infringement. *Ortho Pharm.*, 52 F.3d at 1031 (a non-exclusive licensee “suffers no legal injury from infringement and, thus, has no standing to bring suit or even join in a suit with the patentee.... [E]conomic injury alone does not provide standing to sue under the patent statute”). (GCL 1-5.)

B. NZNA Is a Non-Exclusive Licensee Based on the Clear and Unambiguous Language of the TLA

Whether a license is exclusive or non-exclusive is determined by the license agreement itself. See *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, ___ F.3d ___, Nos. 05-1311, 05-1335, 2006 WL 3346155, at *16 (Fed. Cir. Nov. 20, 2006); *Textile Prods.*, 134 F.3d at 1484. “To qualify as an exclusive license, an agreement must clearly manifest the patentee’s promise to refrain from granting to anyone else a license in the area of exclusivity.” *Textile Prods.*, 134 F.3d at 1484; see also *DePuy*, 2006 WL 3346155, at *16; *Ortho Pharm.*, 52 F.3d at 1033-34; *Intuitive Surgical, Inc. v. Computer Motion, Inc.*, 214 F. Supp. 2d 433, 439 (D. Del. 2002). (GCL 6.)

The TLA, which gives NZNA the right to use technology covered by the ’031 Patent, clearly and unambiguously states that the license granted is *non-exclusive*. See TE 240, A-16028–A-16033. Specifically, the TLA grants NZNA a “*non-exclusive non-transferable right and license, without right to sublicense, to use the Technology in the process of producing enzymes, including finished products and concentrates, and to make and use apparatus and machinery of implementing and maintaining that process.*” See TE 240 at NV-D-0174019,

A-16028 (emphasis added). The TLA also includes a covenant not to sue “under any patent that may issue in the United States to [Novozymes] and which claims all or any portion of the Technology.” *Id.* The TLA does *not* grant any right to exclude others from making, using or selling the Technology. (GFF 6-11.)

Thus, the TLA gives NZNA a *non*-exclusive license in the '031 Patent because it expressly grants only a non-exclusive license to use “Technology,” because Novozymes explicitly retains the right to sublicense and because the TLA contains little more than a covenant not to sue, which is another *non*-exclusive license. *See Ortho Pharm.*, 52 F.3d at 1031. Based on the express terms of the TLA and the substance of the grant, NZNA is a *non*-exclusive licensee without standing to sue. (GCL 9-10.)

C. The Court May Not Imply an Exclusive License Because There Is an Unambiguous, Non-Exclusive Written License Agreement

1. Black Letter Principles of Contract Interpretation Bar Use of Extrinsic Evidence to “Interpret” an Unambiguous Contract

Novozymes’ trial witnesses repeatedly admitted that the TLA governs NZNA’s rights to the '031 Patent and is expressly a *non*-exclusive license,¹ but claimed that Novozymes “treats” the agreement as exclusive. *See Meyer*, Tr. (D) 30:10-31:11, A-15029:10–15030:11; *Olofson*, Tr. (D) 177:3-178:3, A-15176:3–15177:3. (GFF 10.) Novozymes argues in its opening brief that the TLA’s express, binding terms are not controlling, and that the Court should override these terms by looking to extrinsic evidence to “infer the intent of the parties” and imply an exclusive license. Pl. Br. at 29.

Novozymes mischaracterizes the law. While it is true that some courts have considered non-contract facts and circumstances when determining whether to imply an exclusive license, they have done so *only* when there is *no written agreement* between these parties, *see e.g.*,

¹ Novozymes’ lawyers agree. Novozymes twice referred to NZNA as a *non*-exclusive licensee under the '031 Patent in its original brief supporting its motion to add NZNA as a co-plaintiff. *See* 07/25/06 Plaintiff’s Opening Brief in Support of Its Motion for Leave to Modify the Scheduling Order for the Purpose of Amending Its Complaint, D.I. 145.

Kalman v. Berlyn Corp., 914 F.2d 1473 (Fed. Cir. 1990); *Aspex Eyewear, Inc. v. Altair Eyewear, Inc.*, 361 F. Supp. 2d 210 (S.D.N.Y. 2005); *Weschler v. Macke Int'l Trade, Inc.*, 399 F. Supp. 2d 1088 (C.D. Cal. 2005), or when the *written agreement is silent or ambiguous* as to exclusivity. See e.g., *Ricoh Co. v. Nashua Corp.*, 947 F. Supp. 21, 23-24 (D.N.H. 1996). Neither is the case here. Novozymes does not, and cannot, cite to any precedential cases that have implied an exclusive license in the face of an explicit and unambiguous non-exclusive written license. This is because such a holding would directly contradict the well-established principle that clear contractual terms govern contract interpretation. (GCL 11.)

To interpret a contract, a court looks to the plain language of the contract's express terms. See *Barron Bancshares, Inc. v. United States*, 366 F.3d 1360, 1375 (Fed. Cir. 2004); *McAbee Constr., Inc. v. United States*, 97 F.3d 1431, 1435 (Fed. Cir. 1996).² When the contract's language is clear and unambiguous, "it must be given its 'plain and ordinary' meaning and the court may not look to extrinsic evidence to interpret its provisions." *Teg-Paradigm Envtl., Inc. v. United States*, 465 F.3d 1329, 1338 (Fed. Cir. 2006); *Barron Bancshares*, 366 F.3d at 1375; *McAbee Constr.*, 97 F.3d at 1435; *Interwest Constr. v. Brown*, 29 F.3d 611, 615 (Fed. Cir. 1994) ("[E]xtrinsic evidence...should not be used to introduce an ambiguity where none exists."); *Beta Sys., Inc. v. United States*, 838 F.2d 1179, 1183 (Fed. Cir. 1988) ("[E]xtrinsic evidence will not be received to change the terms of a contract that is clear on its face."). "To permit otherwise would cast a long shadow of uncertainty over all transactions and contracts." *McAbee Constr.*, 97 F.3d at 1436 (citation omitted). (GCL 7.)

The Federal Circuit quite recently confirmed these principles. In *DePuy Spine, Inc. v.*

² The TLA states that it is governed by North Carolina law. See TE 240 at NV-D-0174019, A-16028. North Carolina courts apply these same principles of contract law articulated by the Federal Circuit. See *Fidelity Bankers Life Ins. Co. v. Dortch*, 348 S.E.2d 794, 796 (N.C. 1986) ("Only when the contract is ambiguous does strict construction become inappropriate."); *Financial Servs. of Raleigh, Inc. v. Barefoot*, 594 S.E.2d 37, 42 (N.C. Ct. App. 2004) ("Under North Carolina law, when the language of the contract is clear and unambiguous, construction of the agreement is a matter of law for the court, and the court cannot look beyond the terms of the contract to determine the intentions of the parties."). (GCL 8.)

Medtronic Sofamor Danek, Inc., decided just last month, the Court determined that the plaintiff was an exclusive licensee based *solely* on a written license agreement between the patent owner and the licensee. 2006 WL 3346155, at *16. Applying Indiana law (which follows the “‘four corners rule’ of contract interpretation in which courts do not look beyond the instrument in question to determine the parties’ intent if the terms of the instrument are unambiguous”), the Court found that the contract unambiguously provided an exclusive license; it stopped its analysis there and did not look to any extrinsic evidence. *Id.* (GCL 12.)

Similarly, there is no need to look beyond the TLA because it, and the term “non-exclusive,” are clear and unambiguous, as Novozymes’ trial witnesses repeatedly admitted. *See Meyer, Tr. (D) at 30:10-31:11, A-15029:10–15030:11; Olofson, Tr. (D) at 177:3-178:2, A-15176:3–15177:2.* The TLA conveys a non-exclusive right to use the Technology, with a covenant not to sue NZNA under any licensed patent. Novozymes explicitly retains the right to sublicense and does not convey to NZNA any right to exclude others from making, using or selling products that practice the ’031 Patent. All terms of the TLA are consistent with its express and unambiguous grant of a non-exclusive license. It would be legally improper to go further. NZNA is a non-exclusive licensee without standing. (GFF 6-11; GCL 13.)

2. Novozymes’ Extrinsic Evidence Actually Proves that NZNA Is a Non-Exclusive Licensee

In its Opening Brief and Proposed Findings, Novozymes barrages the Court with facts supposedly proving that NZNA is impliedly an exclusive licensee. *See Pl. Br. at II.C.* Novozymes misses the point, because, notwithstanding the facts it selectively cites, Novozymes and NZNA were deliberately created and maintained as separate entities and continue to keep their legal relationship at “arms length.” *See Loft, Tr. (D) 64:25-66:1, A-15063:25–15065:1, 68:1-4, A-15067:1-4.* (GFF 4-5.) Their contract thus governs their relationship.

Moreover, the facts Novozymes fails to emphasize, or even mention, actually prove NZNA is a non-exclusive licensee. Novozymes admits it owns the ’031 Patent and maintains

complete control over the patent. *See* Meyer, Tr. (D) 11:19-25, A-15010:19-25, 18:14-16, A-15017:14-16. Novozymes admits that it gives NZNA access to its technology only under specific written agreements, and does not convey any ownership interest in its technology to NZNA through these agreements. *See* Meyer, Tr. (D) 19:7-22, A-15018:7-22. Novozymes admits that the TLA is the agreement that provides the “legal structure” for the relationship between Novozymes and NZNA. *See* Meyer, Tr. (D) 27:16-28:5, A-15026:16–15027:5 (stating that the TLA “allows the North American organization to operate and sell [and] produce products”), 35:6-16, A-15034:6-16, 44:10-15, A-15043:10-15. Novozymes admits the TLA states that it is “non-exclusive,” and that it is purposefully non-exclusive in anticipation of instances in which Novozymes wishes to give patent rights to others as well as NZNA. *See* Meyer, Tr. (D) 30:10-31:11, A-15029:10–15030:11, 38:9-39:6, A-15037:9–15038:6. *And Novozymes admits that it has licensed the Technology covered under the TLA to parties in addition to NZNA. See* Meyer, Tr. (D) 46:17-47:25, A-15045:17–15046:25. (GFF 6-11; GCL 14.)

Novozymes’ numerous admissions of non-exclusivity are consistent with the unambiguous TLA: NZNA only has the right to use the technology of the ’031 Patent and does not have any right to exclude others from making, using or selling this technology. Novozymes’ irrelevant mantra (“we treat it as exclusive”) changes nothing — NZNA is a non-exclusive licensee without any proprietary interest in the ’031 Patent, and does not have standing here.³

3. Novozymes’ Authority Is Irrelevant and Distinguishable

Novozymes incorrectly cites to *WMS Gaming Inc. v. Int’l Game Tech.*, 184 F.3d 1339

³ Novozymes’ other mantra (“NZNA is the sole licensee”) is equally irrelevant. The fact that a licensee is the “sole” licensee is not enough in itself to confer standing. *See Bicon*, 441 F.3d at 956 (affirming denial of standing; evidence that licensee was “only licensee” was not enough to find exclusive licensee); *Sicom*, 427 F.3d at 980 (affirming denial of standing to “sole”/“only” licensee; licensee failed to demonstrate substantial rights in patent); *Rite-Hite*, 56 F.3d at 1553 (“The grant of a bare license to sell an invention in a specified territory, even if it is the only license granted by the patentee, does not provide standing without the grant of a right to exclude others.”). (GCL 21.)

(Fed. Cir. 1999). In *WMS*, the Court allowed the parent to recover its subsidiary's lost profits because the defendants had *stipulated* to an exclusive license relationship. 184 F.3d at 1361. There is no such stipulation here. *See* Pl. Br. at 24-30. (GCL 15.)

Union Carbide Chems. & Plastics Tech. Corp. v. Shell Oil Co., 425 F.3d 1366 (Fed. Cir. 2005) relates to an entirely different issue. There, the court permitted the jury to consider evidence of a non-exclusive licensee's lost profits because it would bear on what the patentee would seek as a reasonable royalty. 425 F.3d at 1377-78. The court did *not* permit recovery of the non-exclusive licensee's lost profits, but, rather, the opposite (a royalty is, after all, the alternative to a lost profits claim). (GCL 15.)

Novozymes most heavily relies on *Kalman*, 914 F.2d at 1479-82, as supposed support for its argument that an exclusive license may be implied here. *Kalman* provides no such support and is easily distinguishable on several grounds.⁴ (GCL 16.)

a. *Kalman – no written license agreement*

In *Kalman*, there was no evidence of a written license agreement between the patentee and licensee. This left the court free to consider extrinsic evidence to determine whether it could imply an exclusive relationship. *Cf. Beta Sys., Inc.*, 838 F.2d at 1183. (GCL 17.)

b. *Kalman – licensee practiced the patent in suit*

In *Kalman*, the licensee manufactured and sold products that practiced the patent. *See Kalman*, 914 F.3d at 1480 (it is “clear to all parties that the Autoscreen device, manufactured and marketed solely by PDL, is an embodiment of the device claimed in the ’017 patent”). Here, Novozymes’ Liquozyme does not practice the ’031 Patent; in fact, NZNA does not make, use or sell *any* products that practice the ’031 Patent. *See* Olofson, Tr. (D) 176:13-177:2, A-15175:13–15176:2; Uncontroverted Facts at ¶ H, A-14503. *Kalman* turned in great part on the need to

⁴ The other cases on which Novozymes relies all are cases from which Novozymes picks and chooses *dicta* out of context, when the cases’ holdings actually support Defendants’ analysis and argument. *See Waterman v. Mackenzie*, 138 U.S. 252 (1891); *Rite-Hite*, 56 F.3d 1538; *Ortho Pharm.*, 52 F.3d 1026; *Textile Prods.*, 134 F.3d 1481; *Ricoh*, 947 F. Supp. at 23-24. (GCL 15.)

protect the licensee's use of the patent at issue. That is hardly the case here. (GCL 18.)

c. *Kalman – licensee specifically formed to manufacture and sell patented product*

In *Kalman*, the relationship between the patentee and licensee is factually distinct from that of Novozymes and NZNA. Dr. Kalman, the inventor/patentee, together with his brother, formed an entity, "PDL," for the specific purpose of manufacturing and selling the device that practiced the patent at issue in the case. *See Kalman*, 914 F.2d at 1475. Here, Novozymes admits that it and NZNA are separate legal entities, which have an "arms length" relationship. *See Loft*, Tr. (D) 64:25-66:1, A-15063:25–15065:1, 68:1-4, A-15067:1-7. Novozymes further admits that this separate corporate status is carefully maintained for tax purposes.⁵ *See Meyer*, Tr. (D) 36:8-24, A-15035:8-24; *Loft*, Tr. (D) 64:25-66:1, A-15063:25–15065:1. NZNA was formed long before the '031 Patent issued, and certainly was not formed to practice the '031 Patent (something Novozymes has never thought worth doing). (GFF 4-5; GCL 19.)

Kalman is irrelevant and not controlling.

D. Without NZNA as a Co-Plaintiff, Novozymes Cannot Recover NZNA's Lost Profits

Novozyms' expert Ms. Davis admitted she offered no opinion as to Novozymes' lost profits damages claim if NZNA is not a party to this case. *See Davis*, Tr. (D) 302:25-303:4,

⁵ Moreover, courts "view skeptically requests to ignore the corporate form when such requests come from the party responsible for establishing the corporation." *Schreiber Foods, Inc. v. Beatrice Cheese, Inc.*, 305 F. Supp. 2d 939, 953 (E.D. Wis. 2004), *rev'd on other grounds*, 402 F.3d 1198 (Fed. Cir. 2005) (holding that patentee's parent company who had a non-exclusive license did not have standing). Courts have repeatedly rejected efforts to blur the lines between legal entities for standing purposes, regardless of their affiliation. *See, e.g., Merial Ltd. v. Intervet, Inc.*, 430 F. Supp. 2d 1357, 1362 (N.D. Ga. 2006) (holding that parent company with non-exclusive license has no standing); *Carver v. Velodyne Acoustics, Inc.*, 202 F. Supp. 2d 1147, 1149 (W.D. Wash. 2002) (holding that manufacturing entity has no standing; a party "may not...take advantage of the corporate form and simultaneously shun its disadvantages"); *Lans v. Gateway 2000, Inc.*, 84 F. Supp. 2d 112, 123 n.10 (D.D.C. 1999), *aff'd*, 252 F.3d 1320 (Fed. Cir. 2001) (holding that sole shareholder/managing director of patent holding company did not have standing to sue; the law "generally does not allow the option of 'reverse piercing' the corporate veil when it suits the corporation's owner")(citation omitted). The law does not permit a "corporate plaintiff in a patent-infringement case to have it both ways" by taking advantage of corporate form while at the same time denying its disadvantages. *Schreiber Foods*, 305 F. Supp. 2d at 953-54. (GCL 20.)

A-15302:25–15303:4. Novozymes is not entitled to an award of lost profits because it has not even tried to prove them in the absence of NZNA as a party. (GCL 25.)

Relying on cases regarding standing, not lost profits, Novozymes contends that even if NZNA is not a co-plaintiff, Novozymes may recover NZNA's lost profits because of the entities' "close relationship." *See* Pl. Br. at 24-26. The Federal Circuit disagrees. It specifically refused to dispense with corporate structure in a case in which a patentee did not practice the patent, and the sales of products that competed with the infringing product were made not by the patentee, but by one of its corporate affiliates. *See Poly-America, L.P. v. GSE Lining Tech., Inc.*, 383 F.3d 1303, 1311 (Fed. Cir. 2004) (holding that a patentee could not recover lost profits on sales by its sister corporation). The *Poly-America* court stated that a patentee "may not enjoy the advantages of ... separate corporate structure[s] and, at the same time, avoid the consequential limitations of that structure – in this case, the inability of the patent holder to claim the lost profits of its non-exclusive licensee." *Id.* (GCL 26.)

Novozyymes purposefully structured the TLA and its relationship with NZNA for significant tax benefits. *See* Loft, Tr. (D) 64:25-65:20, A-15063:25–15064:20, 75:15-77:15, A-15074:15–15076:15.⁶ Because Novozymes enjoys the benefits of its corporate structure and agreements with NZNA, it should not be allowed to "avoid the consequential limitations of that structure." *Poly-America*, 383 F.3d at 1311. Novozymes may not disregard the corporate form it created, and the TLA it wrote, in order to recover NZNA's purported lost profits.⁷ (GCL 27.)

⁶ The TLA was created for the purpose of allocating taxes between the U.S. and Denmark. *See* Meyer, Tr. (D) 36:8-24, A-15035:8-24; TE 240, A-16028–A-16033. The 40% royalty set forth in the TLA resulted from negotiation between Novozymes and the U.S. and Danish tax authorities aimed, by NZNA, at reducing its U.S. taxes. *See* Loft, Tr. (D) 75:17-76:1, A-15074:17–15075:1, 77:8-19, A-15076:8-19, 78:9-79:23, A-15077:8–15078:23, 80:11-14, A-15079:11-14; Olofson, Tr. (D) 169:13-170:2, A-15168:13–15169:2; TE 740, A-16722–A-16829. (GFF 6-9.)

⁷ Novozymes may argue on reply that it is entitled to NZNA's lost profits under the 40% royalty provision of the TLA. Under the TLA, Novozymes receives 40% of NZNA's net sales of Liquezyme. *See* Loft, Tr. (D) 64:16-23, A-15063:16-23; TE 240, A-16028–A-16033. Novozymes would still have to prove NZNA's lost "but for" sales; Novozymes would only

Because NZNA is not properly a party, Novozymes' claim for NZNA's alleged lost profits should be wholly denied.

III. NOVOZYMES IS NOT ENTITLED TO LOST PROFITS DAMAGES

Novozymes does not compete with Genencor, and cannot seek NZNA's lost profits as its own. Ignoring that bar, Novozymes builds an enormous lost profits figure solely based on speculation, completely ignoring customer behavior after SPEZYME® Ethyl was removed from the market. When faced with a choice between Liquozyme and Genencor's other products, customers chose Genencor, almost exclusively. Even were the Court to entertain proof of lost profits, Novozymes cannot claim to have met its burden to prove lost sales and profits in the "but for" world, when the best evidence of what would happen in that world completely undercuts the assumptions Novozymes' expert had to make to build an exaggerated lost profits claim.

A. Legal Standard for Lost Profits Damages

Novozymes bears the burden of proving lost profits. *See BIC Leisure Prods., Inc. v. Windsurfing Int'l, Inc.*, 1 F.3d 1214, 1217 (Fed. Cir. 1993) (citing *SmithKline Diagnostics, Inc. v. Helena Labs. Corp.*, 926 F.2d 1161, 1164 (Fed. Cir. 1991)). Lost profits awards "can not be based upon speculation or optimism, but must be established by evidence." *Hebert v. Lisle Corp.*, 99 F.3d 1109, 1119 (Fed. Cir. 1996); *see also*, *BIC Leisure*, 1 F.3d at 1218. Courts do not hesitate to deny lost profits where the patentee fails to establish lost profits to a reasonable probability. *See Grain Processing Corp. v. American Maize-Prods. Co.*, 185 F.3d 1341, 1343 (Fed. Cir. 1999); *BIC Leisure*, 1 F.3d at 1219; *Panduit Corp. v. Stahl Bros. Fibre Works, Inc.*, 575 F.2d 1152, 1156 (6th Cir. 1978). (GCL 23.)

Novozymes may *only* recover lost profits by proving "a causal relation between the infringement and its loss of profits," showing it would have received additional profits "but for"

(continued...)

receive 40% of lost "but for" net sales (Novozymes has already recovered its 40% of the sales not lost). As will be seen, though, Novozymes has not met its burden to prove lost sales without speculation, so it should take nothing regardless of the TLA. (GFF 8; GCL 25-27, 44, 50.)

the infringement. *BIC Leisure*, 1 F.3d at 1218. Establishing “but for” causation and entitlement to lost profits entails a reconstruction of the applicable market “as it would have developed absent the infringing product,” (*Grain Processing*, 185 F.3d at 1350) through “sound economic proof of the nature of the market.” *Crystal Semiconductor Corp. v. TriTech Microelecs. Int’l, Inc.*, 246 F.3d 1335, 1353-54 (Fed. Cir. 2001) (citing *Grain Processing*, 185 F.3d at 1350). (GCL 23.)

The Federal Circuit has recognized the four-factor *Panduit* test and the two-supplier market test as methods for evaluating “but for” causation of the existence and amount of lost profits. *See Rite-Hite*, 56 F.3d at 1545; *BIC Leisure*, 1 F.3d at 1218-19; *Micro Chem., Inc. v. Lextron, Inc.*, 318 F.3d 1119, 1124 (Fed. Cir. 2003). Where a patentee fails to prove just one factor of either test, courts deny lost profits awards. *See, e.g., Slimfold Mfg. Co. v. Kinkead Indus., Inc.*, 932 F.2d 1453, 1458 (Fed. Cir. 1991) (denying lost profits without reaching a challenge to the proof of the amount of lost profits for failure to prove lack of acceptable non-infringing substitutes); *Grain Processing*, 185 F.3d at 1349 (denying lost profits for failure to establish absence of acceptable non-infringing substitutes); *Panduit*, 575 F.2d at 1156 (denying lost profits for failure to establish the amount of profit due to lack of evidence on patentee’s fixed costs). Even were this Court to consider lost profits, given that NZNA is not a party, Novozymes fails to carry its burden on *two* important issues, absence of acceptable non-infringing alternatives and “but for” profit margin. Thus, no lost profits should be awarded. (GCL 24.)

B. Lost Profits Should Be Denied Because Novozymes Has Not Met Its Burden of Proof Regarding The Absence of Non-Infringing Alternatives

Ms. Davis testified that Novozymes’ damages model is founded totally upon the assumption that there were no non-infringing alternatives. *See* Davis, Tr. (D) 541:14-542:3, A-15541:14-15542:3. Proof that Genencor had even one acceptable noninfringing substitute available vitiates Novozymes’ entire damages model, causing Novozymes to fail the *Panduit* test and rebutting any two-supplier market presumption. *See Micro Chem.*, 318 F.3d at 1125 (citing *Kaufman Co. v. Lantech, Inc.*, 926 F.2d 1136, 1142 (Fed. Cir. 1991)); *BIC Leisure*, 1 F.3d at

1218-19. (GCL 28-29, 44.)

Genencor had not only one, but *four* non-infringing substitutes for SPEZYME® Ethyl: SPEZYME® Fred, SPEZYME® Fred L, SPEZYME® HPA and SPEZYME® XTRA.⁸ Novozymes' arguments that these alternatives were not acceptable or available fail. (GFF 20, 26-33, 37-38; GCL 31.)

1. Genencor's Alternative Products Were and Are Acceptable Substitutes for SPEZYME® Ethyl

a. Customer needs and preferences decide acceptability

Acceptability of an alternative product is determined by consumers of the infringing product because “[c]onsumer demand defines the relevant market and relative substitutability among products therein.” *Grain Processing*, 185 F.3d at 1355. Products need not be identical to a patented product to be deemed acceptable because, “by definition, noninfringing products do not represent an embodiment of the invention.” *SmithKline*, 926 F.2d at 1166. Novozymes would be hard-pressed to argue that former SPEZYME® Ethyl customers would insist on purchasing alpha-amylases that embody the claims of the '031 Patent, because Novozymes insists that NZNA would have recaptured the SPEZYME® Ethyl sales with Liquozyme, which does not practice the '031 Patent. *See* Olofson, Tr. (D) 176:13-177:1, A-15175:13-15176:1; TE 741 at 8, A-16837; Uncontroverted Facts at ¶ H, A-14503. (GFF 12; GCL 30.)

An alleged lack of patented advantages is relevant *only* “if it is shown that consumers

⁸ There is no dispute on the issue of “non-infringing.” Novozymes has not alleged that SPEZYME® Fred, SPEZYME® Fred L, SPEZYME® HPA or SPEZYME® XTRA infringe any Novozymes' patent, and they do not infringe the '031 Patent. SPEZYME® Fred and Fred L are derived from the alpha-amylase isolated from *Bacillus licheniformis* rather than *Bacillus stearothermophilus* and do not contain the engineered deletions claimed in the '031 Patent. *See* Crabb, Tr. (D) 367:2-9, A-15367:2-9, 368:6-12, A-15368:6-12; TE 721, A-16716-A-16717; TE 722, A-16718-A-16719. Similarly, SPEZYME® HPA contains an alpha-amylase derived from *Bacillus licheniformis* and does not contain any specifically engineered deletions. *See* Crabb, Tr. (D) 370:7-20, A-15370:7-20; TE 723, A-16720-A-16721. While SPEZYME® XTRA is derived from *Bacillus stearothermophilus*, it does not contain the required deletions at positions 179 and 180. *See* Crabb, Tr. (D) 400:21-401:6, A-15400:21-15401:6. (GFF 38; GCL 31.)

specifically want a device with those advantages.” *Slimfold Mfg.*, 932 F.2d at 1458;⁹ *see also SmithKline*, 926 F.2d at 1166 (stating that “if the realities of the market are that others would likely have captured sales made by the infringer, despite a difference in the products, it follows that the ‘but for’ test is not met”). Novozymes tries to focus only on properties such as required product concentration, thermostability, viscosity reduction and calcium requirement. *See* Pl. Br. at 11. However, focusing on such technical variation divorced from analysis of demonstrated customer preferences is not instructive of true customer behavior in the “but for” world—especially here, where each customer has a slightly different process of making fuel ethanol, and may not seek the same features as every other customer. *See* Crabb, Tr. (D) 365:5-13, A-15365:5-13; Beto, Tr. (D) 416:10-417:4, A-15416:10–15417:4; TE 687 at NV-D-0126379, A-16654. Critically, when examining acceptability of a product in the “but for” world, because “a difference in product/process technology does not automatically disqualify a product as an acceptable noninfringing substitute . . . [t]he Court looks to the purchaser’s motivation, first, then to the product features in determining whether a substitute exists.” *Joy Techs., Inc. v. Flakt, Inc.*, 954 F. Supp. 796, 803-05 (D. Del. 1996) (Farnan, J.) (emphasis added). (GFF 17; GCL 30, 37.)

b. *The customers have spoken – Genencor’s other products are at least acceptable, if not preferable to Liquezyme*

As Novozymes’ own expert contended, the relevant customers here are former SPEZYME® Ethyl customers. *See* Davis, Tr. (D) 238:23-239:6, A-15237:23–15238:6; TE 741 at 8, A-16837. SPEZYME® Ethyl legally entered the market by April 2004. *See* FF (Liability) 57, A-10023. In the “but for” world, SPEZYME® Ethyl would have been removed from the market on March 15, 2005, the day that the ’031 Patent issued. *See* TE 100, A-7001–7040. Thus, the

⁹ Novozymes misrepresents the authority on this point. *See Standard Havens Prods., Inc. v. Genecor Indus., Inc.*, 953 F.2d 1360, 1373 (Fed. Cir. 1991) (holding that “[a] product on the market which lacks the advantages of the patented product can hardly be termed an acceptable substitute *to a customer who wants those advantages*”) (emphasis added). Novozymes, however, cites this case without the final phrase, incorrectly alleging that *Standard Havens* holds that a “product on the market which lacks the advantages of the patented product can hardly be termed an [acceptable] substitute.” *See* Pl. Br. at 11. (GCL 30.)

“but for” world would have began with multiple customers who had used SPEZYME[®] Ethyl forced to chose a new product, after a long period of SPEZYME[®] Ethyl use. (GFF 44; GCL 32.)

There is compelling evidence of customer behavior in this “but for” world: actual customer reaction to Genencor’s decision to pull SPEZYME[®] Ethyl from the market on August 25, 2006, in response to the liability decision by this Court. *See Uncontroverted Facts ¶ C, A-14502.* Novozymes’ expert Ms. Davis agreed that “the relevant question” for determining what SPEZYME[®] Ethyl customers would have done “but for” the infringement is to ask “what those [SPEZYME[®] Ethyl] customers would do in the absence of SPEZYME[®] Ethyl.” Davis, Tr. (D) 344:16-21, A-15344:16-21. The Federal Circuit likewise recognizes that choices which former customers make after the infringing product is removed from the market are highly instructive for predicting customer choices in the “but for” world. *See BIC Leisure*, 1 F.3d at 1218 (“[m]oreover [patentee’s] sales continued to decline after the district court enjoined BIC’s infringement. This aspect of the record shows as well that Windsurfing did not capture its market share of the sales replacing BIC’s market sales”).¹⁰ (GCL 34.)

Ms. Davis admitted that she did not know the answer to the question of customer behavior after SPEZYME[®] Ethyl’s removal, even though that question was critical to the lost profits analysis. *See Davis*, Tr. (D) 343:4-344:21, A-15343:4-15344:21. The numbers do not lie, and they speak loudly, despite Novozymes’ efforts to conceal their significance:¹¹ since

¹⁰ Indeed, because real world customer behavior is such strong evidence of customer preference, the evidence Novozymes cites of Genencor’s internal speculation or worry during the development of SPEZYME[®] XTRA should not be given any weight beyond the speculation that it is. The mere fact that Genencor planned conservatively does not mean that the Court should ignore customers’ actual reactions to the products.

¹¹ Novozymes originally produced to Genencor a demonstrative of sales of alpha-amylases in which Novozymes had highlighted rising sales of SPEZYME[®] Fred and SPEZYME[®] XTRA following removal of SPEZYME[®] Ethyl from the market. Novozymes’ expert admitted that what was shown in the highlighting was “substitution” of Genencor’s other products for SPEZYME[®] Ethyl. *See Davis*, Tr. (D) 307:6-309:13, A-15307:6-15309:13; TE 775, A-16872. Tellingly, Novozymes chose to remove this highlighting from the version of the demonstrative it used in court. *See Davis*, Tr. (D) 307:6-16, A-15307:16-15.

SPEZYME[®] Ethyl was removed from the market on August 25, 2006, almost every SPEZYME[®] Ethyl customer has purchased one of Genencor's other products, not Liquozyme.¹² Ms. Davis recognized that these customers were expressing their alpha-amylase preferences with their own money—a much stronger statement than simply stating their preference. *See* Davis, Tr. (D) 309:19-310:15, A-15309:19-15310:19. (GCL 34.)

This alone proves Genencor's four non-infringing alpha-amylases were acceptable substitutes in the “but for” world. Yet there is even stronger support of SPEZYME[®] XTRA's acceptability. Sales were made of SPEZYME[®] XTRA following trials *even while SPEZYME[®] Ethyl was still on the market*. *See* Beto, Tr. (D) 195:12-196:7, A-15194:12-15195:7; Davis, Tr. (D) 308:19-309:18, A-15308:19-15309:18; TE 775, A-16872. Novozymes cannot argue that customers would not have found SPEZYME[®] XTRA acceptable in a “but for” world when, in the actual world, customers chose to purchase SPEZYME[®] XTRA while SPEZYME[®] Ethyl was still on the market and thereafter.¹³ (GFF 17, 33; GCL 36.)

¹² About 76% of former SPEZYME[®] Ethyl customers have purchased an alternate alpha-amylase product from Genencor (SPEZYME[®] Fred, SPEZYME[®] Fred L, SPEZYME[®] HPA or SPEZYME[®] XTRA); about 14% of former SPEZYME[®] Ethyl customers are in the process of testing products; and only about 10% responded to the loss of SPEZYME[®] Ethyl by purchasing an alpha-amylase product from NZNA. *See* Beto, Tr. (D) 425:9-17, A-15425:9-17; Post-Trial Demonstrative A, attached hereto as Appendix A. All four of Genencor's non-infringing substitutes have been purchased by former SPEZYME[®] Ethyl customers as replacements for SPEZYME[®] Ethyl, including SPEZYME[®] Fred L (Beto, Tr. (D) 418:4-24, A-15418:4-24), SPEZYME[®] Fred (Beto, Tr. (D) 422:23-25, A-15422:23-25), SPEZYME[®] HPA (Beto, Tr. (D) 423:1-17, A-15423:1-17) and SPEZYME[®] XTRA (Beto, Tr. (D) 422:20-22, A-15422:20-22, 423:4-13, A-15423:4-13, 424:12-14, A-15424:12-14). (GFF 17, 36-38.)

¹³ Novozymes agrees that the best indicator of customer motivations in the “but for” world would be “parallels in the real world,” Faller, Tr. (D) 246:11-12, A-15245:11-12. Novozymes ignores the evidence of real customer decisions in favor of speculation based on the world in 1999, when Liquozyme was on the market before SPEZYME[®] Ethyl was launched. *See* Faller, Tr. (D) 246:11-16, A-15245:11-16. This is not a close parallel. The fuel ethanol market dramatically changed from 1999, when Liquozyme first entered the market, to the but for world of March 2005 – August 2006. Novozymes' Faller admitted that when Liquozyme first launched, there were only about 30 ethanol plants in the United States, but that there were 77 ethanol plants when the '031 Patent issued, and today there are around 103-105. *See* Faller, Tr. (D) 113:21-114:6, A-15112:21-15113:6, 126:23-127:18, A-15125:23-15126:18. Ms. Davis admitted the fuel ethanol market and political climate are different today than in 1999. *See* Davis, Tr. (D) 314:14-315:1, A-15314:14-15315:1. (GFF 16; GCL 33.)

Genencor's alternatives were obviously acceptable substitutes to former SPEZYME[®] Ethyl customers, the only arbiters of acceptability. *See Grain Processing*, 185 F.3d at 1355 (“[c]onsumer demand defines the relevant market and relative substitutability among products therein”). Novozymes has not met its burden to prove otherwise. (GCL 30.)

2. XTRA Was Available in the “But For” World

Novozyms argues that because SPEZYME[®] XTRA was not on the market during the accounting period, it is irrelevant to this case.¹⁴ Novozymes is incorrect, because Federal Circuit precedent “permits available alternatives – including but *not limited to products on the market* – to preclude lost profits damages.” *Grain Processing*, 185 F.3d at 1353 (emphasis added); *see also Slimfold*, 932 F.2d at 1458 (technology available before the accounting period constitutes a non-infringing alternative because the infringer could have used it during the accounting period). XTRA meets all of the findings underlying the *Grain Processing* holding. *See id.* (GCL 39.)

Not only could Genencor “readily obtain all of the materials needed” for SPEZYME[®] XTRA from the beginning of the accounting period, but it also had the “knowledge to design” and “necessary equipment, know-how and experience to create” SPEZYME[®] XTRA well before March 15, 2005. *Grain Processing*, 185 F.3d at 1353-54. Genencor had DNA underlying the alpha-amylase enzyme now sold as SPEZYME[®] XTRA before the accounting period began in March 2005. *See* Crabb, Tr. (D) 374:9-376:7, A-15374:9–15376:7; Faller, Tr. (D) 92:22-24, A-15091:22-24; TE 228 at 6, ¶ 15, A-16006; FF (Liability) 61, A-10024–10025, 67, A-10027, 69, A-10028. Genencor had the ultimate source of this DNA, the wild type *B. stearothermophilus*, for even longer, initially obtaining it as early as 1986, and acquiring an unmodified *B. stearothermophilus* alpha-amylase construct from Enzyme Bio-Systems at the same time it

¹⁴ There is no dispute that SPEZYME[®] Fred, SPEZYME[®] Fred L and SPEZYME[®] HPA were all continuously on the market since before issuance of the '031 Patent and were available during the accounting period. *See* Beto, Tr. (D) 417:11-19, A-15417:11-19, 418:25-419:11, A-15418:25–15419:11; Faller, Tr. (D) 108:15-24, A-15107:15-24; Uncontroverted Facts ¶ H, A-14503. (GFF 20; GCL 38.)

acquired the construct that led to SPEZYME[®] Ethyl, around 2002. *See* Crabb, Tr. (D) 371:18-20, A-15371:18-20; TE 228 at ¶ 11, A-16004, A-16005. Genencor had the host expression system that is used to produce the alpha-amylase enzyme now sold as SPEZYME[®] XTRA, known as the “licheniformis generic host expression system,” prior to March of 2005. *See* Crabb, Tr. (D) 399:19-400:3, A-15399:19-15400:3, 401:7-12, A-15401:7-12. And, this Court’s own findings demonstrate that Genencor had knowledge of the technical design and feasibility of SPEZYME[®] XTRA at the beginning of the accounting period, as they demonstrate that Genencor had marketed another product with the same alpha-amylase technology prior to that time. *See* FF (Liability) 61, A-10024-10025, 67, A-10027, 69; A-10028; Faller, Tr. (D) 92:22-24, A-15091:22-24.¹⁵ (GFF 26-29; GCL 40-41.)

Thus, as with the defendants in *Grain Processing*, there were no technical reasons preventing Genencor from developing SPEZYME[®] XTRA in March 2005. *See* Crabb, Tr. (D) 402:18-20, A-15402:18-20. Genencor did not create and market SPEZYME[®] XTRA earlier because, while still highly profitable, SPEZYME[®] XTRA had a lower profit margin than SPEZYME[®] Ethyl and, as discussed in Section V, Genencor “reasonably believed [it] had a noninfringing product” in SPEZYME[®] Ethyl. *Grain Processing*, 185 F.3d at 1354; *see also* Crabb, Tr. (D) 205:9-11, A-15204:9-11, 402:4-17, A-15402:4-17; TE 483 at 15, A-16624. While, as in *Grain Processing*, Genencor would have had incentive to develop SPEZYME[®] XTRA in the “but for” world, it had a purely economic motive not to develop it sooner in the actual world, where it believed SPEZYME[®] Ethyl was not infringing. *See Grain Processing*, 185

¹⁵ Genencor marketed G997 prior to the introduction of SPEZYME[®] Ethyl. *See* Faller, Tr. (D) 88:3-15, A-15087:3-15, 91:19-24, A-15090:19-24. This alpha-amylase was a wild type *Bacillus stearothermophilus* alpha-amylase. *See* FF (Liability) 61, A-10024-10025; Faller, Tr. (D) 92:22-24, A-15091:22-24. This Court has found that G997 “contains a 29 amino acid deletion at the C-terminus.” FF (Liability) 67, A-10027, 69, A-10028. SPEZYME[®] XTRA is also composed of an alpha-amylase enzyme that is “identical to the wild type [*Bacillus stearothermophilus* alpha-amylase] in all respects with the exception that it is lacking the last 29 amino acids at the C terminal end of the molecule.” Crabb, Tr. (D) 399:23-400:3, A-15399:23-15400:3. (GFF 26.)

F.3d at 1354. (GFF 30; GCL 41.)

Finally, as in *Grain Processing*, customers did not demand the exact features claimed in the '031 Patent, but rather demanded a type of product for which “the patented product is just one exemplar.” *Id.* The best proof is customer choices after SPEZYME® Ethyl left the market. Novozymes’ argument that Liquozyme, which does not practice the '031 Patent, would have captured those sales is also a damning admission. *See* Pl. Br. at 16. (GFF 31; GCL 41.)

None of the cases cited by Novozymes contradicts the finding that SPEZYME® XTRA was available during the accounting period. Novozymes heavily relies on *Micro Chem., Inc. v. Lextron, Inc.*, 318 F.3d 119 (Fed. Cir. 2003), but this case actually reiterates that *Grain Processing* “provided guidelines for when an alternative not actually ‘on sale’ during the infringement period may have been readily ‘available’ and thus part of the economic calculation of lost profits.” *Id.* at 1122.¹⁶ (GCL 42.)

Ms. Davis admitted that the only way to arrive at Novozymes’ claimed lost profits amount is to assume that in the “but for” world, “Novozymes captures 100 percent of the former SPEZYME® Ethyl sales.” Davis, Tr. (D) 541:14–542:3, A-15541:14–15542:3.¹⁷ The time for

¹⁶ While the Federal Circuit did find the product in *Micro Chem.* was not “available” during the infringement, it did so because, unlike with SPEZYME® XTRA, the infringer lacked the necessary equipment and know-how to make the new product during that time period. *Id.* at 1123. Similarly, *Honeywell Int’l, Inc. v. Hamilton Sundstrand Corp.*, 166 F. Supp. 2d 1008, 1030 (D. Del. 2001), *rev’d on other grounds*, 370 F.3d 1131 (Fed. Cir. 2004), also cited by Novozymes, found technology was not available because the infringer was not capable of implementing the alternative design during the accounting period, customer recapture of the alternative was questionable, and the infringer had attempted unsuccessfully to solve the problem the patent addressed all through the accounting period. Those factors are not present here. Likewise, *Cordis Corp. v. Boston Scientific Corp.*, No. Civ. 03-027-SLR, 2005 WL 1322953, at *3 (D. Del. June 3, 2005), also cited by Novozymes, is distinguishable. The *Cordis* court found that the mere fact that there were licensees to the patent in question who could legally make noninfringing alternatives did not mean the alternatives were, in fact available. Here, Genencor has demonstrated its own (not licensee) noninfringing alternatives were available under the *Grain Processing* test. (GCL 42-43.)

¹⁷ Ms. Davis thus relied on an even assumption even more extreme even than NZNA’s own internal projections, *see* Faller, Tr. (D) 132:20-133:6, A-15131:20–15132:6; TE 687, A-16650–A-16671, and demonstrably untrue. While insisting it would have recaptured all SPEZYME® Ethyl sales, Novozymes almost casually offers a recalculation of damages based on retaining 83% of these sales (apparently based on Mr. Faller’s projection). This recalculation

projections and assumptions has passed—former SPEZYME[®] Ethyl customers have now spoken. The purchasing decisions former SPEZYME[®] Ethyl customers made after SPEZYME[®] Ethyl was pulled from the market in August 2006 unequivocally show that Ms. Davis’ assumption is not correct: Genencor has non-infringing alternatives that customers find acceptable. NZNA would not have gotten 100% of SPEZYME[®] Ethyl sales in the “but for” world. Thus, Novozymes has not established to a reasonable probability that it would have made the asserted profits absent infringement. *See Ericsson, Inc. v. Harris Corp.*, 352 F.3d 1369, 1377 (Fed. Cir. 2003). Lost profits should be denied. (GFF 36-37; GCL 44.)

C. Lost Profits Damages Should Be Denied Because Novozymes Has Not Demonstrated the Amount of Its “Lost Profit” to a Reasonable Probability

Under both the *Panduit* and two-supplier market tests, Novozymes must also independently prove to a reasonable probability the amount of the profit it would have made but for the infringement. *See BIC Leisure*, 1 F.3d at 1218-19; *Oiness v. Walgreen Co.*, 88 F.3d 1025, 1029-30 (Fed. Cir. 1996) (refusing to award lost profits when plaintiff offered as evidence of the amount of lost profits “vague estimation and gross extrapolation [in addition] to unsupported presumption”); *Panduit*, 575 F.2d at 1156 (denying lost profits for patentee’s failure to establish the amount of profit he would have made); *Micro Chem.*, 318 F.3d at 1124-25. Novozymes has failed in this proof. (GCL 45.)

Novozymes bases its lost profits calculation on the assumption that “[f]or every kilogram of Ethyl sold, a kilogram of Liquozyme would have been sold instead.” Pl. Br. at 16. However,

(continued...)

proves Novozymes has not, in fact, proven its alleged lost profits to a reasonable probability. And, it flies in the face of the facts: the highest percentage of sales Novozymes could have demonstrated it would recapture is 10% of former SPEZYME[®] Ethyl sales, as the evidence in the record shows that NZNA only secured 10% of former Ethyl sales when SPEZYME[®] Ethyl was removed from the market in August 2006. *See Beto*, Tr. (D) 422:20-425:17, A-15422:20-15425:17. As such, any argument by Novozymes that Liquozyme would have gained more than 10% of SPEZYME[®] Ethyl sales in the “but for” world is based solely on speculation. Because “[d]amage awards can not be based upon speculation or optimism, but must be established by evidence,” Novozymes’ equivocation about its “but for” sales share dooms its lost profits claim. *See Hebert*, 99 F.3d at 1119. (GFF 36-37; GCL 35.)

Novozymes relies on the testimony of Ms. Davis that she based her lost profits calculations on a one to one substitution rate because “the documents from both parties *seem to suggest* that that was a one for one substitution rate.” Davis, Tr. (D) 257:14-21, A-15256:14-21 (emphasis added).¹⁸ However, Ms. Davis failed to point to any specific evidence to support what she admitted was her bald assumption. *See id.* Ms. Davis’ assumption and vague recollection about what documents “seemed to suggest” do not establish the fact of how much Liquozyme customers would have used to replace a kilogram of SPEZYME® Ethyl to a reasonable probability. (GCL 46-47.)

Additionally, Novozymes’ damages model is based on the assumption that there was no price elasticity for alpha-amylase products during the relevant time, that customers would buy identical amounts regardless of the price. Ms. Davis admitted that the only way to arrive at her lost profits amount “to a reasonable certainty” is that one must “assume no price elasticity” in the relevant price range in the “but for” world. Davis, Tr. (D) 541:14-542:3, A-15541:14-15542:3. However, both she and Dr. Teece agreed that this is simply incorrect — price elasticity could not have been zero. *See* Davis, Tr. (D) 547:3-19, A-15547:3-19; Teece, Tr. (D) at 451:12-22, A-15451:12-22.¹⁹ (GFF 35; GCL 49.)

Because the evidence does not support Ms. Davis’ assumption, the only lost profits figure

¹⁸ Novozymes also cited testimony of Jeffrey Faller for the proposition that “[b]ut for the infringement, Novozymes would have sold the same amount of Liquozyme [as the amount of SPEZYME® Ethyl Defendants sold].” Pl. Br. at 5. However, the cited Faller testimony does not discuss the proportion of Liquozyme that customers would use to replace a kilogram of SPEZYME® Ethyl, but instead discusses loss of Liquozyme market share due to legal competition from SPEZYME® Ethyl prior to the issuance of the ’031 Patent. *See* Faller, Tr. (D) 104: 4-13, A15103:4-13. (GFF 48.)

¹⁹ Novozymes misrepresents Dr. Teece’s testimony on this point. Dr. Teece was clear that while his chart “doesn’t prove [Ms. Davis’s assumption of zero price elasticity] is incorrect, *but it does suggest if the price is going to be jumped by this amount to assume that there isn’t some amount of responsiveness by customers is really going against the grain of basic economic principles.*” Teece, Tr. (D) 452:18-25, A-15452. Novozymes, however, cites only the first half of Dr. Teece’s answer, ignoring the evidence that Ms. Davis’ assumption “go[es] against the grain of basic economic principles.” *See* Pl. FF 96.

offered by Novozymes has not been proven to a reasonable certainty. Novozymes has not met its burden to prove the amount of its lost profits; none should be awarded.²⁰ (GCL 50.)

IV. NOVOZYMES IS ENTITLED TO NO MORE THAN AN 8% ROYALTY

As an alternative to lost profits damages, Novozymes argues that a “reasonable royalty” for the use of the ’031 Patent in the U.S. fuel ethanol market would be 25%, based on the “Rule of Thumb” and the so-called “Analytical Method.” Pl. Br. at 22-24. In addition, Novozymes contends that a reasonable royalty for the use of the ’031 Patent “outside the U.S. fuel ethanol market” (meaning either in a foreign country or in an industry outside of ethanol) would be no less than 8%, based on the terms of an actual license between Genencor and Novozymes (which its expert did not consider when determining the 25% figure). Pl. Br. at 21 n.10.

Novozymes cannot prove its proposed 25% reasonable royalty to a reasonable certainty, nor can it explain why a higher royalty should be charged in one market than another. If any royalty is to be awarded, only an 8% royalty is reasonable, for all infringing sales.

A. Legal Standard for Reasonable Royalty Damages

A patentee may be awarded infringement damages “in no event less than a reasonable royalty,” assuming the patentee meets its “burden of proving [the] amount [of the award].” 35 U.S.C. § 284; *see also Oiness*, 88 F.3d at 1029 (citing *SmithKline*, 926 F.2d at 1164). Any

²⁰ Novozymes also failed to demonstrate its price erosion damages to a reasonable probability. Novozymes has recognized that there are many forces, such as customer pressures and buying groups, which bring about lower prices, to the point that “[p]ricing declines are a regular part of business.” Faller, Tr. (D) 155:1-19, A-15154:1-19. Novozymes failed to prove that these forces were not the cause of the alleged price erosion of Liquezyme after the issuance of the ’031 Patent. Without such proof, Novozymes has failed to show that “but for” the infringement, Liquezymes’ price would not have declined. Further, as discussed above, other non-infringing alternative products would have been on the market in the “but for” world. Novozymes has offered no proof that these non-infringing alternatives would have had the same impact on prices that Novozymes’ alleges SPEZYME[®] Ethyl had. Finally, Novozymes’ price erosion number is also predicated on zero price elasticity, which both experts in this case have testified is not possible. *See Davis*, Tr. (D) 541:14-542:3, A-15541:14-15542:3, 547:3-19, A-15547:3-19; *Teece*, Tr. (D) at 451:12-22, A-15451:12-22. For each of these reasons, Novozymes has failed to prove price erosion damages to a reasonable probability and may not recover such damages. (GFF 21; GCL 51-53.)

reasonable royalty awarded “must be supported by relevant evidence in the record,” *Unisplay, S.A. v. American Elec. Sign Co.*, 69 F.3d 512, 517 (Fed. Cir. 1995), and be based on “sound economic and factual predicates.” *Riles v. Shell Exploration & Prod. Co.*, 298 F.3d 1302, 1311 (Fed. Cir. 2002); *see also Transclean Corp. v. Bridgewood Servs., Inc.*, 290 F.3d 1364, 1376 (Fed. Cir. 2002). A patentee may not collect a reasonable royalty beyond the amount it has proven in the trial record. *See Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 895 F.2d 1403, 1406 (Fed. Cir. 1990). Courts may deny a reasonable royalty award altogether if a patentee fails to adduce relevant evidence on which the court may base a reasonable royalty award. *See Devex Corp. v. General Motors Corp.*, 667 F.2d 347, 362-63 (3d Cir. 1981), *aff’d on other grounds*, 461 U.S. 648 (1983); *Transclean*, 290 F.3d at 1377. (GCL 54-56.)

B. Novozymes’ “Reasonable Royalty” Is Neither Reasonable Nor Reasonably Certain

To support a 25% reasonable royalty, Ms. Davis relied on two infrequently used approaches — the “Rule of Thumb” and the “Analytical Method.” Both are methodologies of last resort, used by experts when “other available information that informs the view as to what [a] reasonable royalty rate should be” is lacking. Teece, Tr. (D) 473:8-474:16, A-15473:8–15474:16; *see also* Davis, Tr. (D) 550:15-551:3, A-15550:15–15551:3. Novozymes’ use of these theories is flawed, such that Ms. Davis’ analysis cannot result in establishing a reasonable royalty to a reasonable certainty. Ms. Davis’ failure to consider substantial evidence from reliable third-party sources is further proof that the 25% reasonable royalty figure is unsound. (GCL 57.)

1. Misguided Application of the “Rule of Thumb”

There is “no real deep analytical justification” for the Rule of Thumb, which is simply a methodology sometimes used when there is a lack of transactional data. Teece, Tr. (D) 473:8-474:16, A-15473:8–15474:16. In such situations, the Rule of Thumb is used to apportion the profit that would be generated from use of the patented technology, the licensee receiving 75% of

the profit and the licensor receiving 25%. *See id.* All-important to any attempt to rely on this analysis, however, is its proper application: the 75%/25% split must be applied to incremental profit, *i.e.*, the profit margin attributable to the invention, not simply to the net profit margin. *See id.* at 461:9-20, A-15461:9-20 (“an incremental profitability analysis should underpin any analysis of reasonable royalty”). (GCL 58.)

In applying the Rule of Thumb, Ms. Davis’ conclusions rested on her assumption that Genencor had no commercially-viable non-infringing alternatives. *See* Davis, Tr. (D) 306:8-307:5, A-15306:8–15307:5. As a result, in Ms. Davis’ analysis, all of Genencor’s profits from its sale of SPEZYME® Ethyl in the U.S. fuel ethanol industry would have been lost if it had not taken a license from Novozymes. Ms. Davis then applied the 75%/25% split to Genencor’s net profit margin on SPEZYME® Ethyl, rather than to incremental profits (the difference between profits from SPEZYME® Ethyl compared to Genencor’s alternatives). *See* Davis, Tr. (D) 290:14-291:14, A-15290:14–15291:14. (GCL 59.)

Ms. Davis’ assumption is wrong: Genencor did and continues to have commercially-viable non-infringing alternatives, including SPEZYME® Fred, SPEZYME® HPA and SPEZYME® XTRA. *See supra* III, B. As a result, Genencor would have earned some profits from pursuing such alternatives, so the relative measure of Genencor’s incremental profit is the difference between the profits Genencor actually made and the profits that it would have made in the “but for” world using one of those alternative(s). *See* Teece, Tr. (D) 464:19-465:7, A-15464:19–15465:7. As Dr. Teece testified, “[a]s a matter of economics, you are not going to pay more for technology than you have to.... [I]f you have a good alternative, that is going to affect the bargaining range. ... you would be willing to pay something based on the incremental profits you would get from using ’031 versus some alternative.” *Id.* at 464:19-465:7, A-15464:19–15465:7. Further, Liquozyme would have lost sales in the “but for” world to Genencor’s alternative products, which would be taken into account when the parties (hypothetically) negotiated for a license to the ’031 Patent. *See id.* at 466:17-467:11,

A-15466:17–15467:11. (GCL 60.)

Unlike Ms. Davis, Dr. Teece estimated Genencor’s “but for” profits based on “but for” sales of Genencor’s alternative products. *See* Teece, Tr. (D) 471:13–472:19, A-15471:13–15472:19; TE 764, A-16864. Taking these incremental profits into account, as required if the Rule of Thumb methodology is to be used, Dr. Teece determined that at a 25% rule of thumb, the reasonable royalty would be between 5.67% and 8.34% depending on SPEZYME[®] XTRA’s availability. *See* Teece, Tr. (D) 476:9–480:7, A-15476:9–15480:7; TE 769, A-16866. (GCL 66.)

Ms. Davis had nothing meaningful to say in rebuttal. She only offered that it is not clear whether Genencor’s non-infringing alternatives would continue to sell. *See* Davis, Tr. (D) 342:24–344:21, A-15342:24–15344:21. The overwhelming evidence is to the contrary. Novozymes’ 25% “Rule of Thumb” royalty rests on an assumption that is untrue, rendering it highly speculative, at best. It cannot be accepted. *See W.L. Gore & Assoc., Inc. v. Carlisle Corp.*, No. 4160, 1978 WL 21430, 198 U.S.P.Q. 353, 368 (D. Del. May 17, 1978) (royalty “must be determined solely on the basis of the submitted evidence and upon an evaluation of the factors that could affect the reasonable royalty, not upon mere conjecture”). (GCL 59, 60, 64.)

2. The “Analytical Method” Is Unreliable

Ms. Davis also employed the so-called Analytical Method to get to Novozymes’ desired 25% royalty. This method purportedly compares the profits on the infringer’s accused sales with “normal” profits on other similar products. The difference between the two is set as the royalty to be paid to the patentee. *See* Teece, Tr. (D) 480:19–481:22, A-15480:19–15481:22. (GCL 61.)

There are at least two major problems with the Analytical Method, such that it is just unreliable. *See* Teece, Tr. (D) 484:23–24, A-15484:23–24. First, the Analytical Method assumes that the best non-infringing alternative available to the infringer would only allow the infringer to earn the “normal” or (benchmark) profit margin on incremental sales. But from an economic perspective, what matters is the infringer’s next-best non-infringing alternative, not what is the “normal margin.” *See* Teece, Tr. (D) 480:25–481:1, A-15480:25–15481:1, 482:25–483:1,

A-15482:25–15483:1, 483:25–484:24, A-15483:25–15484:24. Second, the Analytical Method is extremely sensitive to the time period one chooses for the data. *See* Teece, Tr. (D) 482:5–484:4, A-15482:5–15484:4. (GCL 61–62.)

Dr. Teece demonstrated the flaws in the Analytical Method, as shown in TE 770. Here, he replicated the analysis Ms. Davis undertook, but also applied it to other Genencor products as well as to another time period (the 12 month total that SPEZYME[®] Ethyl was actually on the market vs. the artificial 6 month time period that Ms. Davis chose). *See id.* Ms. Davis compared the net profit margin on SPEZYME[®] Ethyl to SPEZYME[®] Fred over a six month period and came up with a 27% reasonable royalty (subtracting the net profit margin of Fred from the net profit margin of Ethyl). However, Dr. Teece showed that when one simply adjusts for a 12 month time period, that reasonable royalty determination drops to 13%. Moreover, when he compared the net profit margin on SPEZYME[®] Ethyl to the available data on SPEZYME[®] XTRA (the next-best non-infringing alternative), that figure falls to 7%. *See id.* Based on these sensitivities, the Analytical Method is completely unreliable, lacking in sound economic and factual predicates. *See Riles*, 298 F.3d at 1130. (GCL 63.)

C. If Novozymes Is Entitled to Any Royalty at All, an 8% Reasonable Royalty Is Consistent with the Evidence

The methods on which Novozymes relies to support a 25% royalty are unreliable and/or not properly applied. As a result of relying on these methods, Novozymes has not met its burden to prove a reasonable royalty amount, and none, certainly not 25%, should be awarded. *See Transclean*, 290 F.3d at 1377; *Riles*, 298 F.3d at 1311. Should the Court decide to independently consider the evidence to determine a reasonable royalty, an 8% reasonable royalty is consistent with all of evidence of what the parties would have agreed to in the “hypothetical negotiation.”²¹ (GCL 64–65.)

²¹ Factors relevant to a reasonable royalty determination are set out in *Georgia-Pacific Corp. v. United States Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970), *modified and aff'd*, 446 F.2d 295 (2d Cir.), *cert. denied*, 404 U.S. 870 (1971). “Despite the fact that th[e] hypothetical negotiation factor is just one of the factors on the [Georgia-Pacific factor] list, the hypothetical negotiation is a method for incorporating the other factors in order to arrive at a

1. The Only License Between the Parties on Record Establishes a 5% - 8% Royalty

Ms. Davis relied on an actual license between Novozymes' predecessor and Genencor for her calculation of a reasonable royalty for fields of use in the fuel ethanol industry outside of the United States and in industries other than fuel ethanol (namely, food and beverage). The royalty rate set in the Filamentous Fungi License Agreement on which she relied is between 5% and 8%. Although this license is in the field of pharmaceuticals rather than grain processing or fuel ethanol, it is relevant to this case because it evidences what the parties thought was a reasonable range of royalty rates for fields at least as important as fuel ethanol. The royalty established in the license is based on "royalty rates typically paid for comparable products in comparable markets." *See* TE 339 at GCOR171759, A-16125. The parties knew it was proper to look in other fields to set license rates, even though Ms. Davis did not. (GFF 40; GCL 67.)

2. All Other, Independent Evidence Dr. Teece Considered (and Ms. Davis ignored) Supports an 8% Royalty

Dr. Teece testified that when calculating a reasonable royalty, "one of the things that I always like to consider, if there is data available, is other royalty agreements and industry level ranges." Teece, Tr. (D) 469:16-20, A-15469:16-20. He considered these "a check on whether or not the basic methodologies and findings [of his reasonable royalty calculation] are correct." Teece, Tr. (D) 470:16-19, A-15470:16-19. Ms. Davis ignored this evidence. (GFF 41; GCL 68.)

The other sources Dr. Teece considered all support an 8% royalty. *See* TE 771, A-16870 (summarizing other royalty agreements and industry rates reviewed by Dr. Teece). Dr. Teece reviewed numerous license agreements that each side offered into evidence, including many between Novozymes and Genencor, and noted that the royalty rates varied from 0% up to 4%.

(continued...)

reasonable royalty rate." *Studiengesellschaft Kohle m.b.H. v. Dart Indus., Inc.*, 666 F. Supp. 674, 680 (D. Del. 1987), *aff'd*, 862 F.2d 1564 (Fed. Cir. 1988). Both parties' experts agreed that the hypothetical negotiation is the most important factor to consider here. *See* Davis, Tr. (D) 277:14-278:2, A-15277:14-15278:2; Teece, Tr. (D) 461:21-462:3, A-15461:21-15462:3. (GCL 56.)

See Teece, Tr. (D) 485:22-486:8, A-15485:22–15486:8; TE 771, A-16870. Dr. Teece also reviewed the deposition transcript of Novozymes’ employee Ms. Nonboe, and noted that the highest royalty rate in a Novozymes’ outlicense was 8%. *See* Teece, Tr. (D) 486:9-16, A-15486:9-16; TE 771, A-16870. (Ms. Nonboe was present at trial but did not testify.) (GFF 42; GCL 68.)

Additionally, Dr. Teece reviewed many third party sources, including a recent study by Mark Lemley of Stanford University and Robert Shapiro of the University of California, Berkeley that looks at adjudicated royalty rates, broken down by industry. Dr. Teece noted that in the biotechnology industry, the royalty rate was 9.6% and in the chemistry industry, it was 11.98%. *See* Teece, Tr. (D) 486:17-487:6, A-15486:17–15487:6; TE 771, A-16870. Dr. Teece reviewed information gathered from the Licensing Economic Review, a 20+ year old publication that “endeavors to present to practitioners information on royalty rates....” *See* Teece, Tr. (D) 489:5-12, A-15489:5-12; TE 771, A-16870. The Licensing Economic Review stated that the overall industry average was a 6.7% royalty, with a 4.7% royalty for the chemicals industry, a 5.0% royalty for energy & environment, 4.0% for food processing and 7.3% for pharmaceutical & biotechnology. *See* Teece, Tr. (D) 490:8-14, A-15490:8-14; TE 771, A-16870. And, Dr. Teece also commissioned a report from the “Royalty Source” database, with a request to look at catalyst related technologies in the chemical industry. *See* Teece, Tr. (D) 490:15-25, A-15490:15-25; TE 771, A-16870. This report concluded that royalties in this industry ranged from 1.0% to 8.0%. *See* TE 771, A-16870. (GFF 42; GCL 68.)

The great weight of the evidence, as opposed to arbitrary “methodologies,” plainly supports an 8% (if not lower) reasonable royalty for the U.S. dry mill fuel ethanol market. Ms. Davis was perfectly comfortable with applying the 8% royalty to one market based solely on an agreement between the parties regarding pharmaceutical products. She could not explain why that rate was inappropriate for fuel ethanol, except that it yielded less to Novozymes than it would get based on the misapplied Rule of Thumb and unreliable Analytical Method. Ms. Davis’ failure

of explanation demonstrates just how far Novozymes misses carrying its burden of proof. Considering all evidence, a reasonable royalty of at most 8% would be appropriate, if any royalty is appropriate at all. (GCL 69.)

V. NOVOZYMES IS NOT ENTITLED TO ENHANCED DAMAGES OR ATTORNEYS' FEES

Novozymes mischaracterizes the facts in an effort to paint Genencor as a desperate and willful infringer, to obtain treble damages and attorneys' fees. Considering all the circumstances, this effort fails. This is not a case of deliberate copying, nor could it have been — Genencor did not know of the asserted claims during the development and at the launch of SPEZYME® Ethyl. Once on notice of the '031 claims, Genencor possessed a good faith belief that its conduct was lawful, which belief continued after the patent issued and this litigation commenced. The case was close, as the Court's finding of *prima facie* obviousness demonstrates. Enhancement of damages is not appropriate here.

A. Governing Law

Determining whether to award enhanced damages is a two-step process. First, the Court decides whether Genencor is guilty of conduct, such as willful infringement, that justifies an award of increased damages, then the Court determines whether, and to what extent, it will increase the damages awarded. Both assessments should be evaluated under the totality of the circumstances. *See Jurgens v. CBK, Ltd.*, 80 F.3d 1566, 1570 (Fed. Cir. 1996); *Tristrata Tech., Inc. v. ICN Pharms., Inc.*, 314 F. Supp. 2d 356, 360 (D. Del. 2004); *State Indus., Inc. v. Mor-Flo Indus., Inc.*, 948 F.2d 1573, 1576-77 (Fed. Cir. 1991). (GCL 71.)

Willfulness is a question of fact, as to which Novozymes bears the burden of proof by clear and convincing evidence. *See Golden Blount, Inc. v. Robert H. Peterson Co.*, 438 F.3d 1354, 1368 (Fed. Cir. 2006); *Oxford Gene Tech. Ltd. v. Mergen Ltd.*, 345 F. Supp. 2d 431, 442 (D. Del. 2004). Novozymes “must present threshold evidence of culpable behavior,” *i.e.*, reckless disregard for the patentee's rights. *Golden Blount*, 438 F.3d at 1368 (quoting *Norian Corp. v.*

Stryker Corp., 363 F.3d 1321, 1332 (Fed. Cir. 2004)). An “accused infringer’s knowledge of [the] asserted patent, without more, is insufficient to support a conclusion of willfulness.” *Norian*, 363 F.3d at 1332-33 (emphasis omitted); *Allen Archery, Inc. v. Browning Mfg. Co.*, 819 F.2d 1087, 1099 (Fed. Cir. 1987). When considering allegations of willful patent infringement, courts look to the “totality of the circumstances,” including: whether the infringer deliberately copied the ideas or design of another; whether the infringer, when it knew of the other’s patent protection, investigated the scope of the patent and formed a good-faith belief that the patent was invalid or not infringed; the infringer’s litigation behavior; and the closeness of the case. *See Golden Blount*, 438 F.3d at 1368; *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, 383 F.3d 1337, 1342-44 (Fed. Cir. 2004) (en banc); *Biotec Biologische Naturverpackungen GmbH v. Biocorp., Inc.*, 249 F.3d 1341, 1356 (Fed. Cir. 2001). (GCL 72.)

To obtain attorneys’ fees under 35 U.S.C. § 285, the prevailing party must establish “the exceptional nature of the case . . . by clear and convincing evidence,” such as by showing willful infringement. *Callaway Golf Co. v. Slazenger*, 384 F. Supp. 2d 735, 746 (D. Del. 2005). However, “[e]ven an exceptional case does not require in all circumstances the award of attorneys’ fees.” *eSpeed, Inc. v. Brokertec USA, LLC*, 417 F. Supp. 2d 580, 599 (D. Del. 2006) (Jordan, J.) (quoting *S.C. Johnson & Son, Inc. v. Carter-Wallace, Inc.*, 781 F.2d 198, 201 (Fed. Cir. 1986)). Rather, after determining that a case is exceptional, the court must further determine that attorneys’ fees are warranted by “weigh[ing] considerations such as the closeness of the case, the tactics of counsel, the conduct of the parties, and any other factors that may contribute to a fair allocation of the burdens of litigation as between winner and loser.” *Id.*; *see also Electro Sci. Indus., Inc. v. General Scanning, Inc.*, 247 F.3d 1341, 1353-54 (Fed. Cir. 2001) (upholding denial of attorneys’ fees despite jury’s finding of willfulness due to defendant’s “good-faith belief in the invalidity of the patents” and no egregious litigation conduct). (GCL 85.)

B. Genencor Had a Good Faith Belief that the ’031 Patent Was Invalid

The facts, as opposed to inflammatory rhetoric, make clear Genencor’s good faith.

Genencor's development work leading up to SPEZYME[®] Ethyl started at least as early as 2002, well before the '031 Patent issued. *See* Crabb, Tr. (L) 31:24-32:5, A-5031:24-5032:5. Dr. Crabb explained that the teachings of Suzuki (TE 115, A-8233-8238) provided Genencor with the impetus to make the 179-180 deletion in a *Bacillus stearothermophilus* alpha-amylase while developing SPEZYME[®] Ethyl, well before notice of the '031 Patent. *See* Crabb, Tr. (L) 40:11-41:7, A-5040:11-5041:7. Had Genencor believed that SPEZYME[®] Ethyl might infringe a valid patent, Genencor would not have launched it and would have instead developed alternative products. *See* Crabb, Tr. (D) 389:18-24, A-15389:18-24. (GFF 43-44; GCL 74.)

Genencor did not become aware of the asserted '031 Patent claims until September 29, 2004, over two years after it began developing SPEZYME[®] Ethyl and months after it launched the product in April 2004. *See* Uncontroverted Facts at ¶ H, A-14503. Genencor believed that Suzuki rendered the '031 Patent obvious. Specifically, Genencor understood that SPEZYME[®] Ethyl was "genetically modified to have the two amino acids *at the positions defined by Suzuki* deleted." Crabb, Tr. (D) 383:7-10, A-15383:7-10 (emphasis added), 385:21-25, A-15385:21-25; TE 228, A-16000-A-16015. Dr. Crabb testified that Genencor believed "from a scientific standpoint, anyone that has read that paper [Suzuki] would choose to make those deletions if they wanted to try and improve the thermostability of *bacillus stearothermophilus*." Crabb, Tr. (L) 41:4-7, A-5041:4-7; TE 115, A-8233-8238. Genencor's belief was bolstered by an opinion of counsel regarding the '038 Patent, in which Genencor was advised that the '038 Patent could not have valid claims with scope that were based on the Suzuki deletions. *See* Crabb, Tr. (D) 219:19-25, A-15218:19-25. (GFF 45-47; GCL 75.)

Genencor's belief was hardly a controversial one. As the Patent Office and this Court *both* specifically found, Suzuki (and Bisgard-Frantzen) rendered the '031 claims *prima facie* obvious. The fact that Novozymes had to overcome the rejection by alleged "unexpected results," rather than disproving obviousness, does not change Genencor's good faith belief, it actually proves the point. Novozymes has *never* contested *prima facie* obviousness of the '031

Patent.²² Genencor believed exactly what the Patent Office and this Court found, launching and selling SPEZYME[®] Ethyl on that basis. (GCL 77.)

And, from the earliest date that infringement began (March 15, 2005 – the day the '031 Patent issued and the day Novozymes filed this suit), Genencor had other strong, albeit currently unsuccessful, litigation defenses regarding noninfringement, invalidity and unenforceability.²³ The strength of these defenses, and Genencor's good faith belief it was not infringing a valid patent, was confirmed early in the litigation, when the Court denied Novozymes' motion for preliminary injunction, specifically finding that Genencor had "successfully raised a substantial question as to invalidity." *See* Memorandum Order, D.I. 68. (GCL 77.)

C. Novozyymes Has Not Met Its Burden To Prove Willful Infringement.

Novozyymes fails to make even a threshold showing of willful infringement, and certainly has not carried its "clear and convincing" burden of proof. There is no evidence of direct copying of the '031 Patent by Genencor (how could there have been when no Novozymes' product practices the '031 Patent and Genencor was not aware of the '031 Patent claims upon the launch of SPEZYME[®] Ethyl), and no allegation of litigation misconduct by Genencor. Novozymes thus bases its entire argument for willfulness on whether Genencor had a good faith belief that its conduct was lawful.

As shown above, Genencor has proven a good faith belief in the invalidity of the '031 Patent. Novozymes offers no evidence to contradict Dr. Crabb's credible testimony, instead

²² Novozymes also felt compelled to redo those experiments to support validity. *See, e.g.*, TE 226, A-8556.1–8556.2. Although the Court ultimately found that Genencor had not met its burden to prove on invalidity, it cannot credibly be said that the unexpected results were so clearly reliable that Genencor's belief the '031 Patent was invalid was not in good faith.

²³ For example, Genencor's good faith belief in the validity of the '031 Patent was buttressed upon learning of another prior art reference, Machius '95. *See* TE 173, A-8375–A-8390. The teaching of Machius '95 that the Suzuki deletion is in a loop provided even greater motivation for a scientist to make the two deletions found in SPEZYME[®] Ethyl. Dr. Machius testified, without rebuttal, that after his paper, a protein engineer would consider "making the deletion a *no brainer*." Machius, Tr. (L) 774:3-22, A-6562:3-22 (emphasis added). (GFF 48; GCL 75.)

attacking Genencor's reliance on the opinion of a scientist rather than an attorney opinion regarding the '031 Patent. The Federal Circuit, however, has repeatedly held that reliance on the opinion of an employee with technical expertise, coupled with close questions of fact, can support a finding of no willful infringement – an attorney opinion is not required. *See Union Carbide*, 425 F.3d at 1380; *Biotec*, 249 F.2d at 1355-56; *Nickson Indus., Inc. v. Rol Mfg. Co.*, 847 F.2d 795, 799-800 (Fed. Cir. 1988) (affirming no willful infringement despite no opinion of counsel where infringer thought that many of the patented device's features were covered by prior art and patentee failed to show evidence in the record that would give an inference of bad faith); *Rolls-Royce Ltd. v. GTE Valeron Corp.*, 800 F.2d 1101, 1110 (Fed. Cir. 1986) (affirming no willful infringement where infringer had not copied the patented invention, its engineers believed there would be no infringement problem because of differences in the products, and the patentee's expert conceded that the infringer made bona fide "design around" efforts). (GFF 46; GCL 76.)

Novozymes argues that Genencor's continued sales of SPEZYME[®] Ethyl after receiving notice of the '031 Patent claims is proof of willful infringement.²⁴ This misconstrues the clear and repeated holdings of the Federal Circuit: there is no "universal rule that to avoid willfulness one must cease manufacture of a product immediately upon learning of a patent.... Exercising due care, a party may continue to manufacture and may present what in good faith it believes to be a legitimate defense without risk of being found on that basis alone a willful infringer. That such a defense proves unsuccessful does not establish that infringement was willful." *Gustafson, Inc. v. Intersystems Indus. Prods., Inc.*, 897 F.2d 508, 510-11 (Fed. Cir. 1990) (citation omitted). *See also Union Carbide*, 425 F.3d at 1380-81; *Jurgens*, 80 F.3d at 1571; *Allen Archery*, 819 F.2d at 1099; *State Indus., Inc. v. A.O. Smith Corp.*, 751 F.2d 1226, 1235-36 (Fed. Cir. 1985) (reversing finding of willful infringement where infringer designed and began marketing its

²⁴ Novozymes argues that Genencor's filing of its own patent application somehow demonstrates a lack of good faith, yet it fails to cite to any cases in support of its implicit assertion that one patent application outweighs the totality of the evidence.

product before the asserted patent issued, and its noninfringement and validity defenses were nonfrivolous and asserted in good faith). (GCL 78.)

There is no doubt that Genencor's defenses were non-frivolous and that this is a case close, as evidenced by this Court's denial of the preliminary injunction motion based on its specific finding that Defendants had "successfully raised a substantial question as to invalidity," see Memorandum Order, D.I. 68, and the Court's conclusion that the '031 Patent was rendered *prima facie* obvious in light of the prior art, see CL (Liability) 60-62, A-10045-10046. In these circumstances, there was no willful infringement. (GCL 79.)

In the end, this case was the sort of "fair fight" allowed under the patent laws. The Federal Circuit has explained that "[t]he rules of patent infringement are rules of business ethics, and require prudent commercial actions in accordance with law." *Vulcan Eng'g Co. v. Fata Aluminum, Inc.*, 278 F.3d 1366, 1378 (Fed. Cir. 2002) (affirming as a proper exercise of discretion district court's finding that infringer did not willfully infringe). The concept of willful infringement is used to judge the infringer's conduct against commercially acceptable conduct in a competitive marketplace, where "fair fights" are permitted. Commenting on a familiar scenario, the Federal Circuit explained:

[W]e see the familiar picture of competitors competing, one trying to match a new product of the other with a new product of its own, not copied but doing the same job, and the other manipulating its secret pending patent application to cover the functionally competitive structure it did not think of but deems to embody its proprietary "inventive concept." This is a classic commercial gamesmanship under the patent system but it is not the kind of behavior courts have categorized in the past as willful infringement.... The world of competition is full of "fair fights," of which this suit seems to be one.

State Indus., 751 F.2d at 1235-36. (GCL 79.)

Genencor's refusal to simply give up does not make infringement willful.

D. Even If Genencor's Infringement Was Willful, Damages Should Not Be Enhanced, Nor Attorneys' Fees Awarded

Even if this Court finds Genencor's infringement was willful, it should not enhance the

damages award. “Courts should not automatically enhance damages following a finding of willful infringement because punitive damage penalties deter innovation. Accordingly, punitive damage awards should only be given in cases where conduct is so obnoxious as clearly to call for them.” *Tristrata*, 314 F. Supp. 2d at 360 (citation omitted); *see also Transclean*, 290 F.3d at 1377-78; *Mentor H/S, Inc. v. Medical Device Alliance, Inc.*, 244 F.3d 1365, 1380 (Fed. Cir. 2001) (affirming no enhanced damages despite willful infringement); *Odetics, Inc. v. Storage Tech. Corp.*, 185 F.3d 1259, 1274 (Fed. Cir. 1999) (affirming no enhanced damages because defendant mounted a good faith and substantial challenge to the existence of infringement, did not copy the invention, and did not engage in misconduct during litigation); *Brooktree Corp. v. Advanced Micro Devices, Inc.*, 977 F.2d 1555, 1581 (Fed. Cir. 1992). In fact, “[a]n infringer may generally avoid enhanced damages with a meritorious good faith defense and a substantial challenge to infringement.” *Delta-X Corp. v. Baker Hughes Prod. Tools, Inc.*, 984 F.2d 410, 413 (Fed. Cir. 1993) (affirming denial of enhanced damages despite jury’s willfulness finding, because record did not show that infringer copied the patent or intentionally infringed, record showed that infringer, even though it did not obtain an opinion of counsel, had a good faith belief that it did not infringe, and infringer mounted a substantial defense to infringement). (GCL 80.)

This is not a case about “obnoxious” behavior that gives rise to enhanced damages. *See Jurgens*, 80 F.3d at 1571; *Tristrata*, 314 F. Supp. 2d at 360. For example, as soon as this Court issued its liability opinion (and without having an injunction in place), Genencor voluntarily withdrew SPEZYME® Ethyl from the market. *See Beto*, Tr. (D) 420:20-421:20, A-15420:20–15421:20; Uncontroverted Facts ¶ C, A-14502. Genencor’s response, combined with its prompt response to the Court’s ruling, Genencor’s good faith belief in the invalidity of the ’031 Patent, the substantial defenses put forward during the litigation and the closeness of the case, all demonstrate that enhancing damages would be inappropriate. *See Ajinomoto Co. v. Archer-Daniels-Midland Co.*, 228 F.3d 1338, 1351-52 (Fed. Cir. 2000) (affirming denial of enhanced damages, even though infringer knew of patent and did not obtain advice of counsel, where

infringer mounted “substantial, albeit unsuccessful, challenge on the issues of validity and infringement,” and there was no bad faith). (GCL 81.)

For these same reasons, Novozymes is not entitled to its attorneys’ fees. Because Novozymes has failed to establish that Genencor willfully infringed the ’031 Patent, no exceptional case exists to support an award of attorneys’ fees. *See* 35 U.S.C. § 285; *Callaway Golf*, 384 F. Supp. 2d at 746. Even were this Court to find that Genencor willfully infringed the ’031 Patent, an award of attorneys’ fees is not justified because Genencor’s litigation behavior was reasonable and undertaken in good faith. *See eSpeed, Inc.*, 417 F. Supp. 2d at 599; *Electro. Sci. Inst.*, 247 F.3d at 1353-54. (GCL 82-86.)

VI. NOVOZYMES’ MOTION FOR PERMANENT INJUNCTION SHOULD BE DENIED

A. Governing Law

The Supreme Court has expressly rejected the “categorical grant” of injunctions in patent cases, and made it clear that to receive a permanent injunction, the patentee must meet its burden to prove all four traditional elements of the test for a permanent injunction. *See eBay Inc. v. MercExchange, L.L.C.*, 126 S. Ct. 1837, 1839, 1841 (2006). The Court particularly noted that the Patent Act does not *require* issuance of injunctions upon findings of infringement, but rather specifies only that injunctions “*may*” issue “in accordance with the principles of equity.” *Id.* at 1839-40 (emphasis added). Novozymes parrots language from *eBay*, but ignores its holding and the many cases applying it to patentees who do not exploit their patent. (GCL 89-90.)

B. Novozymes Has Not Proven Irreparable Injury

To receive an injunction, Novozymes must demonstrate that it has suffered an irreparable injury. *See eBay*, 126 S. Ct. at 1839. Novozymes asserts that it has earned a presumption of irreparable harm, but this assertion is flawed. *See* Pl. Br. at 38. The Supreme Court has held that presuming irreparable harm “is contrary to traditional equitable principles.” *Amoco Prod. Co. v. Village of Gambell*, 480 U.S. 531, 544-45 (1987). Such a presumption should not be applied

during a permanent injunction analysis in patent cases. *See eBay*, 126 S. Ct. at 1841; *Paice LLC v. Toyota Motor Corp.*, No. 2:04-CV-211-DF, 2006 WL 2385139, at *4 (E.D. Tex. Aug. 16, 2006) (“no presumption of irreparable harm should automatically follow from a finding of infringement”); *z4 Techs., Inc. v. Microsoft Corp.*, 434 F. Supp. 2d 437, 440 (E.D. Tex. 2006) (presumption of irreparable harm is “not in line with the Supreme Court’s holding, which mandates that courts balance the traditional principles of equity when considering the remedy of a permanent injunction in patent cases.”) Novozymes cannot meet its burden because its only proven harm here is to the right to exclude, which is not irreparable harm. *See eBay*, 126 S. Ct. at 1840 (rejecting the Federal Circuit’s reasoning that the “statutory right to exclude alone justifies its general rule in favor of permanent injunctive relief”). (GCL 91, 93-94.)

Novozymes has admitted that it does not manufacture or sell any products that practice the ’031 Patent. It does not have a for-profit licensing program for the ’031 Patent, nor does it sell products competing with SPEZYME® Ethyl.²⁵ Thus, assuming Novozymes is awarded some reasonable royalty, the only harm it would suffer without an injunction is loss of its right to exclude. Since *eBay*, similarly situated patentees who do not exploit their own patents have been unable to show irreparable harm. In fact, *every* post-*eBay* trial court²⁶ that has faced a patentee who did not exploit its patent denied the patentee an injunction.²⁷ In stark contrast, in each of the

²⁵ While NZNA does sell products that have competed with SPEZYME® Ethyl, patentees cannot establish irreparable harm by pointing to harm suffered by non-party licensees. *See Voda v. Cordis Corp.*, No. CIV-03-1512-L, 2006 WL 2570614, at *5-6 (W.D. Okla. Sept. 5, 2006). (GCL 92.)

²⁶ The Federal Circuit has not yet addressed the merits of a permanent injunction in a patent case post-*eBay*, but its post-*eBay* actions on patent injunctions confirm that injunctions are not guaranteed. *See International Rectifier Corp. v. LXYS Corp.*, No. 2006-1296, 1425, 188 Fed. Appx. 1001, 2006 WL 2036676, at *1 (Fed. Cir. July 14, 2006) (remanding in light of *eBay*); *Abbott Labs. v. Andrx Pharms., Inc.*, 452 F.3d 1331, 1348 (Fed. Cir. 2006) (vacating preliminary injunction); *TiVo Inc. v. EchoStar Commc’ns. Corp.*, No. 2006-1574, slip op. (Fed. Cir. Oct. 3, 2006) (Ex. 1) (staying injunction pending appeal).

²⁷ *See Voda*, 2006 WL 2570614, at *5-6 (patentee had not demonstrated harm where all of the alleged harm was done to patentee’s licensee, a non-party to the case); *Paice*, 2006 WL 2385139, at *1, 4-5 (patentee did not suffer irreparable harm where it did not practice the patent

post-*eBay* patent cases where an injunction has been awarded, the patentee exploited the patent, by practicing and/or licensing it for profit.²⁸ (GFF 12; GCL 95-97.)

Novozymes tries to hide behind an improper presumption of irreparable harm because it cannot meet its burden of *proving* irreparable harm. Novozymes points to alleged loss of good will, sales or price erosion suffered by NZNA, which is improper. *See Voda*, 2006 WL 2570614, at *5-6. Even if that evidence is considered, Novozymes has not proven that the alleged irreparable harms were caused by infringing sales of SPEZYME® Ethyl. Rather, any such harms

(continued...)

and a compulsory license would not harm patentee's attempts to license its technology in the future); *Finisar Corp. v. The DirecTV Group, Inc.*, No. 1:05-CV-264, slip op. at 1 (E.D. Tex. July, 7, 2006) (Ex. 2), referencing *Finisar* July 6, 2006 Hearing Transcript at 123:4-126:20 (Ex. 3) (patentee was not injured where the patentee never "made the slightest effort to ever use the patent"); *z4 Techs.*, 434 F. Supp. 2d at 440-41 (patentee had not been irreparably injured where it has not exploited its patent because, should a compulsory license issue, "[t]he only entity [the patentee] is possibly prevented from marketing, selling or licensing its technology to absent an injunction is [the infringer]"). (GCL 97.)

²⁸ *See 3M Innovative Props. Co. v. Avery Dennison Corp.*, No. 01-1781 (JRT/FLN), 2006 WL 2735499, at *1 (D. Minn. Sept. 25, 2006) (patentee who marketed product with patented features suffered irreparable injury from infringement, compulsory license would not adequately compensate for injury) (details of patentee's product discussed in *3M Innovative Properties Co. v. Avery Dennison Corp.*, No. 01-1781 (DSD/FLN), 2002 WL 31628395, at *2 (D. Minn. Oct. 19, 2002), *vacated by* 350 F.3d 1365 (Fed. Cir. 2003); *Litecubes, L.L.C. v. Northern Light Prods.*, No. 4:04CV00485 ERW, 2006 U.S. Dist. LEXIS 60575, at *31-32 (E.D. Mo. Aug. 25, 2006) (patentee who developed and sold patented device suffered irreparable injury because potential customers bought defendant's infringing products instead of patentee's product); *Rosco, Inc. v. Mirror Lite Co.*, No. CV-96-5658, 2006 WL 2844400, at *5 (E.D.N.Y. Sept. 29, 2006) (finding permanent injunction necessary to adequately compensate patentee who manufactured patented product and distinguishing cases in which a compulsory license could adequately compensate plaintiff who did not practice patent); *Smith & Nephew, Inc. v. Synthes Stratec, Inc.*, No. 02-2873, slip op. at 5-7 (W.D. Tenn. Sept. 28, 2006) (Ex. 4) (patentee who sold patented device suffered irreparable injury in the form of "decreased ability to compete in the market" due to defendant's sale of infringing devices); *Wald v. Mudhopper Oilfield Servs.*, No. Civ-04-1693-C, 2006 WL 2128851, at *5 (W.D. Okla. July 27, 2006) (patentee who sold patented device suffered irreparable harm in the form of lost market share and reputation due to defendant's sale of infringing products); *TiVo Inc. v. EchoStar Commc'ns Corp.*, 446 F. Supp. 2d 664, 669-70 (E.D. Tex. 2006), injunction stayed by *TiVo Inc. v. EchoStar Commc'ns Corp.*, No. 2006-1574, slip op. (Fed. Cir. Oct. 3, 2006) (Ex. 1) (patentee, whose primary product exploited the patent-in-suit, suffered irreparable harm in the form of loss of market share and customer based due to defendant's sale of infringing product); *Black & Decker Inc. v. Robert Bosch Tool Corp.*, No. 04 C 7955, 2006 WL 33446144, at *4 (N.D. Ill. Nov. 29, 2006) (patentee's patented product lost market share to the infringing products) (details of patentee's product discussed in *Black & Decker Inc. v. Robert Bosch Tool Corp.*, No. 04 C 7955, 2006 WL 3069544, at **1-2, 5-6 (N.D. Ill. Oct. 24, 2006). (GCL 97.)

began even before SPEZYME® Ethyl was launched, based on legal competition before the '031 Patent issued and with Genencor's other products that Novozymes now dismisses. *See* Faller, Tr. (D) 103:2-105:1, A-15102:2-15104:1, 137:15-21, A-15136:15-21, 149:25-150:12, A-15148:25-15149:12, 152:24-153:25, A-15151:24-15152:25, 155:1-19, A-15154:1-19; TE 692, A-16672-A-16673.²⁹ Similarly, Novozymes fails to show that the alleged harms are irreparable. For example, Liquozyme sales went up and it won back business *after* SPEZYME® Ethyl was on the market. *See* Faller, Tr. (D) 156:7-25, A-15155:7-25. And these are the types of harm that if proven, can be compensated by money damages. (GFF 20-21, 23-25; GCL 98.)

The only harm Novozymes will suffer if no injunction issues is to the right to exclude, which is not sufficient as a basis for injunctive relief. *See eBay*, 126 S. Ct. at 1840.³⁰ Novozymes has not met its burden to show irreparable harm. No injunction should issue. (GCL 91.)

C. Novozymes Has Not Shown that the Public Interest Would Not Be Disserved by a Permanent Injunction

Novozymes "must demonstrate . . . that the public interest would not be disserved by [entry of] a permanent injunction." *See eBay*, 126 S. Ct. 1839. Novozymes cannot meet this

²⁹ Liquozyme and Termamyl customers were also critical drivers of price declines; these typical business pressures, and the use of buying groups, contributed to NZNA's woes independent of competition from Genencor. *See* Faller, Tr. (D) 155:1-19, A-15154:1-19. And, many customers also chose to purchase a product from Genencor not because of the technology of the '031 Patent, because of Genencor's superior customer service and related issues, and/or chose not to purchase Liquozyme because of displeasure with NZNA. *See* Faller, Tr. (D) 132:20-134:7, A-15131:20-15133:7; 140:16-142:2, A-15139:16-15141:2; 142:3-23, A-15141:3-23; TE 692 at NV-0096787, A-16673 (customer stating he "refuses to do business with a company that conducts itself like Novozymes" around January 2005). (GFF 18, 21, 23-25.)

³⁰ For this same reason, Novozymes cannot show inadequacy of its remedies at law and is not entitled to an injunction. *eBay*, 126 S. Ct. at 1840; *Voda*, 2006 WL 2570614, at *6 (finding monetary damages adequate where patentee did not practice the patent because a damaged relationship with patentee's exclusive licensee is "simply the other side of the right-to-exclude coin and is not sufficient to justify granting injunctive relief"); *Paice*, 2006 WL 2385139, at *5; (stating that "infringing one's right to exclude alone, however, is insufficient to warrant injunctive relief") (citing *eBay*; 126 S. Ct. at 1840); *Finisar* (Hearing Tr. at 125:1-24) (Ex. 3) (finding that compulsory license will adequately compensate patent owner for any future harm); *z4 Techs.*, 434 F. Supp. 2d at 441-42. (GCL 99-101.)

burden because enjoining manufacture and sale of SPEZYME® Ethyl would harm the public. (GCL 102.)

Increasing production and use of fuel ethanol is important to the U.S. for many reasons, including “[c]ontinued demand for less reliance on oil from the Mideast” and “environmental considerations.” TE 353 at NV-0015346-NV-0015348, A-16175–A-16177. NZNA is likely to raise the price of its alpha-amylase products if SPEZYME® Ethyl is enjoined, *see* Faller, Tr. (D) 158:7-14, A-15157:7-14, even though alpha-amylases play a “key role” in the fuel ethanol industry, *see* Meyer, Tr. (D) 36:3-7, A-15035:3-7. Price increases of Liquozyme would inevitably lead to higher costs to fuel ethanol producers and higher prices for fuel ethanol. Novozymes has not met its burden here, either, and no injunction should issue. (GFF 19, 39; GCL 103.)

VII. CONCLUSION

Genencor requests judgment as set forth in its proposed Conclusions of Law.

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